

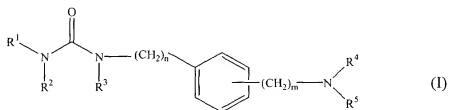
### Amendments to the Claims

Please cancel claims 30 and 33-35 without prejudice. Please amend claims 29, 31 and 36, and add new claims 41-43 as indicated below.

### Listing of Claims

1-28. (cancelled).

29. (currently amended) A compound according to formula I:



wherein

m and n are each and independently an integer from 1-3, and one or more of the hydrogens in the alkylene chain may optionally be substituted by any one of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, or hydroxy; or one or more of the methylene groups may optionally be substituted by a heteroatom selected from O, N or S;

R<sup>1</sup> is selected from hydrogen, a branched or straight C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>3</sub>-C<sub>8</sub> cycloalkyl, C<sub>4</sub>-C<sub>8</sub> (alkyl-cycloalkyl) wherein the alkyl is a C<sub>1</sub>-C<sub>2</sub> alkyl and the cycloalkyl is a C<sub>3</sub>-C<sub>6</sub> cycloalkyl;

R<sup>2</sup> is selected from any of:

- (i) hydrogen;
- (ii) a straight or branched C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl;
- (iii) -[(CH<sub>2</sub>)<sub>q</sub>-aryl], wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined below; and wherein q is an integer from 0 to 3;

- (iv)  $-\text{[(CH}_2\text{)}_r\text{-heteroaryl]}$  wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O and wherein the heteroaryl may be substituted by 1 or 2 substituents Y, wherein each Y is as defined below; and wherein r is an integer from 0 to 3;
- (v)  $\text{C}_3\text{-C}_{10}$  cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls, where each heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (vi)  $\text{C}_6\text{-C}_{10}$  aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (vii) a heteroaryl having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

or  $\text{R}^1$  and  $\text{R}^2$  may optionally form a heterocyclic ring;

$\text{R}^3$  is selected from any one of:

- (i) ~~hydrogen~~;
- (ii i) a ~~straight or branched~~  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_2\text{-C}_6$  alkenyl or  $\text{C}_2\text{-C}_6$  alkynyl;
- (iii ii)  $-\text{[(CH}_2\text{)}_q\text{-aryl]}$  wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (iv iii) a heteroaryl- $(\text{C}_3\text{-C}_{10}\text{alkyl})$ , wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~

heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

- (iv) a C<sub>3</sub>-C<sub>10</sub> cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (v)  $-(C_3-C_6 \text{ cycloalkyl})-(CH_2)_q$  wherein q is an integer from 1 to 3;

R<sup>4</sup> is selected from:

- (i) hydrogen;
- (ii) a straight or branched C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl;
- (iii)  $-[(CH_2)_q\text{-aryl}]$  wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (iv) heteroaryl-(C<sub>3</sub>-C<sub>10</sub> alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (v) a C<sub>3</sub>-C<sub>10</sub> cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (vi) a C<sub>6</sub>-C<sub>10</sub> aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

- (vii) a heteroaryl having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein Y is as defined below;

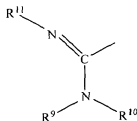
R<sup>5</sup> is selected from:

- (i) hydrogen;
- (ii) a straight or branched C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl;
- (iii) -[(CH<sub>2</sub>)<sub>q</sub>-aryl] wherein q is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (iv) a heteroaryl-(C<sub>5</sub>-C<sub>10</sub> alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl~~ and heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;
- (v) a C<sub>3</sub>-C<sub>10</sub> cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl~~ and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

(vi)



or



wherein R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup> are each and independently selected from:

- (a) hydrogen;
- (b) a straight or branched C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl;

- (c)  $-\text{[(CH}_2\text{)}_q\text{-aryl]}$  wherein  $q$  is an integer from 0 to 3, and wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of the S, N and O; and wherein the aryl and heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;
- (d) a heteroaryl-(C<sub>5</sub>-C<sub>10</sub> alkyl), wherein the heteroaryl has from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the ~~aryl~~ and heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;
- (e) a C<sub>3</sub>-C<sub>10</sub> cycloalkyl, optionally comprising one or more unsaturations and optionally substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and wherein the ~~aryl and~~ heteroaryl may optionally and independently be substituted 1 or 2 substituents Y, wherein each Y is as defined below;
- (f) a C<sub>6</sub>-C<sub>10</sub> aryl, optionally and independently substituted by one or more heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O, and wherein the heteroaryl may optionally and independently be substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

or R<sup>4</sup> and R<sup>5</sup> may optionally form a heterocyclic ring optionally substituted by 1 or 2 substituents Y, wherein each Y is as defined below;

Y is each and independently selected from any of: hydrogen, CH<sub>3</sub>;  $-(\text{CH}_2)_{p1}\text{CF}_3$ ; halogen; C<sub>1</sub>-C<sub>3</sub> alkoxy; hydroxy; -NO<sub>2</sub>; -OCF<sub>3</sub>; -CONR<sup>a</sup>R<sup>b</sup>; -COOR<sup>a</sup>; -COR<sup>a</sup>;  $-(\text{CH}_2)_{p2}\text{NR}^a\text{R}^b$ ;  $-(\text{CH}_2)_{p3}\text{CH}_3$ ;  $(\text{CH}_2)_{p4}\text{SOR}^a\text{R}^b$ ;  $(\text{CH}_2)_{p5}\text{SO}_2\text{R}^a$ ;  $-(\text{CH}_2)_{p6}\text{SO}_2\text{NR}^a$ ; C<sub>4</sub>-C<sub>8</sub>(alkyl-cycloalkyl) wherein the alkyl is a C<sub>1</sub>-C<sub>2</sub> alkyl, and the cycloalkyl is a C<sub>3</sub>-C<sub>6</sub> cycloalkyl; 1 or 2 heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and oxides selected from N-oxides or sulfoxides; and wherein:

$R^a$  and  $R^b$  are each and independently selected from hydrogen, a branched or straight  $C_1$ - $C_6$  alkyl, a  $C_1$ - $C_6$  alkenyl, a  $C_3$ - $C_8$  cycloalkyl; and wherein:

$p^1, p^2, p^3, p^4, p^5$  and  $p^6$  are each and independently 0, 1 or 2;

as well as pharmaceutically acceptable salts, isomers, hydrates, and isoforms thereof;

~~with the proviso that when  $R^1=R^3=R^4=R^5=H$ , then  $R^2$  is not hydrogen or a straight or branched  $C_1$ - $C_6$  alkyl and when  $R^2=R^3=R^4=R^5=H$  then  $R^1$  is not hydrogen or a straight or branched  $C_1$ - $C_6$  alkyl.~~

30. (cancelled).
31. (currently amended) A compound according to claim ~~30~~ 29, wherein  $m=n=1$

$R^1$  is selected from

- (i) a straight or branched  $C_1$ - $C_6$  alkyl; or
- (ii) ~~a  $C_3$ - $C_8$  cycloalkyl~~ hydrogen;

$R^2$  is selected from

- (i) methyl; or
- (ii) phenyl, optionally substituted by 1 or 2 substituents Y wherein ~~each~~ Y is as defined below;

$R^3$  is selected from

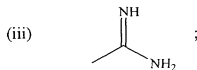
- (i)  $-CH_2$ -phenyl optionally substituted by 1 or 2 substituents Y where Y is as defined below;
- (ii)  $-CH_2$ -cyclohexyl or  $-CH_2$ -cyclopentyl;

$R^4$  is selected from

- (i) hydrogen; or
- (ii) methyl;

R<sup>5</sup> is selected from

- (i) hydrogen;
- (ii) methyl; or



or R<sup>4</sup> and R<sup>5</sup> together form a heterocyclic ring optionally substituted by 1 or 2 substituents Y where Y is as defined below;

Y is each and independently selected from any of: hydrogen, CH<sub>3</sub>; -(CH<sub>2</sub>)<sub>p1</sub>CF<sub>3</sub>; halogen; C<sub>1</sub>-C<sub>3</sub> alkoxy; hydroxy; -NO<sub>2</sub>; -OCF<sub>3</sub>; -CONR<sup>a</sup>R<sup>b</sup>; -COOR<sup>a</sup>; -COR<sup>a</sup>; -(CH<sub>2</sub>)<sub>p2</sub>NR<sup>a</sup>R<sup>b</sup>; -(CH<sub>2</sub>)<sub>p3</sub>CH<sub>3</sub>; -(CH<sub>2</sub>)<sub>p4</sub>SOR<sup>a</sup>R<sup>b</sup>; -(CH<sub>2</sub>)<sub>p5</sub>SO<sub>2</sub>R<sup>a</sup>; -(CH<sub>2</sub>)<sub>p6</sub>SO<sub>2</sub>NR<sup>a</sup>; C<sub>4</sub>-C<sub>8</sub>(alkyl-cycloalkyl) wherein the alkyl is a C<sub>1</sub>-C<sub>2</sub> alkyl, and the cycloalkyl is a C<sub>3</sub>-C<sub>6</sub> cycloalkyl; 1 or 2 heteroaryls having from 5 to 10 atoms, each heteroatom being selected from any of S, N and O; and oxides selected from N-oxides or sulfoxides and wherein:

R<sup>a</sup> and R<sup>b</sup> are each and independently selected from hydrogen, a branched or straight C<sub>1</sub>-C<sub>6</sub> alkyl, a C<sub>1</sub>-C<sub>6</sub> alkenyl, a C<sub>3</sub>-C<sub>8</sub> cycloalkyl; and wherein:

p<sup>1</sup>, p<sup>2</sup>, p<sup>3</sup>, p<sup>4</sup>, p<sup>5</sup> and p<sup>6</sup> are each and independently 0, 1 or 2, and pharmaceutically acceptable salts thereof.

- 33-35. (cancelled).
36. (currently amended) The compound according to claim ~~39~~ 29 wherein:

R<sup>1</sup> is hydrogen or a straight or branched C<sup>1</sup>-C<sup>6</sup> C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>2</sup> is selected from:

- (i) a straight or branched C<sub>1</sub>-C<sub>6</sub> alkyl;

- (ii) a  $[(CH_2)_q\text{-aryl}]$ , wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined in claim 29; and wherein q is an integer from 0 to 3;

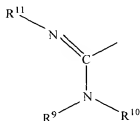
$R^3$  is a  $-[(CH_2)_q\text{-aryl}]$ , wherein the aryl has 6 or 10 carbon atoms and may optionally be substituted by 1 or 2 substituents Y, wherein each Y is as defined in claim 29; and wherein q is an integer from 0 to 3;

$R^4$  and  $R^5$  are is hydrogen or a straight or branched  $C_1\text{-}C_6$  alkyl;

$R^5$  is selected from:

- (i) hydrogen;  
(ii) a straight or branched  $C_1\text{-}C_6$  alkyl; or

(iii)



wherein  $R^9$ ,  $R^{10}$ , and  $R^{11}$  are hydrogen or a straight or branched  $C_1\text{-}C_6$  alkyl;

or  $R^4$  and  $R^5$  may form a heterocyclic ring optionally substituted by 1 or 2 substituents Y, wherein each Y is as defined in claim 29;

as well as pharmaceutically acceptable salts thereof.

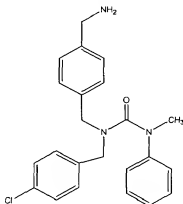
37. (previously presented) The compound of claim 36, wherein Y is each and independently selected from any of: hydrogen,  $CH_3$ ;  $-(CH_2)_pCF_3$ ; halogen;  $C_1\text{-}C_3$ , alkoxy; hydroxy;  $-NO_2$ ;  $-OCF_3$ ;  $CONR^aR^b$ ;  $-COOR^a$ ;  $-COR^a$ ;  $-(CH_2)_pNR^aR^b$ ; and  $-(CH_2)_pCH_3$ ; and wherein:



$R^a$  and  $R^b$  are each and independently selected from hydrogen, a branched or straight  $C_1$ - $C_6$  alkyl, a  $C_1$ - $C_6$  alkenyl, a  $C_3$ - $C_8$  cycloalkyl; and wherein:

$p^1$ ,  $p^2$  and  $p^3$  are each and independently 0, 1 or 2.

38. (previously presented) The compound of claim 37, wherein Y is each and independently selected from any of: hydrogen;  $CH_3$ ;  $-(CH_2)_{p^1}CF_3$ ; halogen;  $C_1$ - $C_3$ , alkoxy; hydroxy;  $-NO_2$ ;  $-OCF_3$ ; and wherein  $p^1$  is 0, 1 or 2.
39. (previously presented) The compound of claim 38, wherein  $R^4$  and  $R^5$  are hydrogen.
40. (previously presented) A compound wherein said compound is:



41. (new) A compound according to any one of claims 29, 31, 32 or 36-40, wherein said compound is in the form of a hydrochloride, sulfate, tartrate or citrate salt.
42. (new) A compound according to any one of claims 29, 31, 32 or 36-40, wherein said compound is isotopically labeled.
43. (new) A pharmaceutical composition comprising a compound according to any one of claims 29, 31, 32 or 36-40 as an active ingredient, together with a pharmacologically and pharmaceutically acceptable carrier.